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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,648	03/01/2002	Robert C. Mayer	CIEL:204	7880

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EXAMINER

KJM, ELLEN E

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 01/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/087,648	MAYER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ellen E Kim	2874	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 November 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All   b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

### **DETAILED ACTION**

This action is responsive to Applicant's amendment filed on 11/17/03.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1- 9, 14, 33, 35-51, and 53 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Doerr et al [USPAT 6,304,350].**

Doerr et al disclose a fiber optic communication assembly and the method comprising an optical communication module 120 having a plurality of at least three fiber optic ports, a plurality of fiber optic conductors [104, 105, see fig. 1], wherein the second end of the first fiber optic conductor is configured to be disposed in remote physical relationship to the second end of the second fiber optic conductor [ see element 106 is disposed in remote physical relationship to element 107].

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2874

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 10-11, 25, 26, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al in view of Swirhun et al [USPAT 5,420,954].**

In re claims 10 and 25, Doerr et al discloses every aspect of claimed invention except for the VCSEL array module. Swirhun et al disclose an optical interconnect showing VCSEL array module coupled to plurality of optical fiber conductors. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Doerr et al's device to include the VCSEL array module instead of WGR for the purpose of reducing misalignment [see column 3, lines 12-16].

In re claims 11 and 26, Doerr et al discloses every aspect of claimed invention except for the multiple fiber connectors. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Doerr et al's device to include the multiple fiber connectors for the purpose of transmitting the light signal in extended distanced area.

**Claims 12 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al, and Swirhun et al as applied to claim 11 above, and further in view of Giebel et al [USPAT 5,971,624].**

Doerr et al and Swirhun et al discloses every aspect of claimed invention except for the MTP connector. Giebel et al teach at column 1, lines 13-23 that MTP connector is utilized for the purpose of high precision. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify the device to include the MTP connector for the purpose of high precision in the fiber connector.

**Claims 13, 15-24, 28-29, 31-32, 34, 52, 54, and 55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doerr et al.**

In re claims 13, 31, 52, and 55, Doerr et al discloses every aspect of claimed invention except for the density of about 0.1 inch per port. It would have been obvious to the ordinary skilled person in the art at the time the invention was made to modify Doerr et al's device to have the density of about 0.1 inch per port, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2d272, 205 USPQ 215 (CCPA 1980).

In re claims 15-24, and 54, discloses the claimed invention except for the plurality of communication modules. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Doerr et al's device to include the plurality of communication modules so that the modules can be coupled to each other, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

***Response to Arguments***

Applicant argues that Doerr does not show the terminating ends of the fibers, which are physically remote from each other as defined within the context of the present specification.

Examiner does not agree with Applicant's argument because Applicant fails to establish the definition of the "physically remote from each other" in the specification. Applicant shows some examples in page 9 of the specification what is "physically remote from each other". The context of the specification, however, is not enough to provide the definition of the "physically remote from each other".

Applicant argues in claim 5 that the optical communication paths 104, 105 in Doerr are already de-multiplexed by the waveguide grating router, and thus the individual paths are not configured to communicate WDM signals.

Examiner considers "...is configured to..." as intended use.

It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).

Applicant argues in claims 6-9, 33, 35-51, and 53 that each optical communication path is compliant with a different standard, i.e. each path is independently operating on a different communication standard and each operates independently from the other.

Examiner notes that Applicant fails to establish what is “communication standard” or how they are different.

Examiner considers that different optical signals have different communication standards.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen Kim whose telephone number is (703) 308-4946. The examiner can normally be reached on Monday and Thursday.

Ellen E. Kim  
Primary Examiner  
January 5, 2004/EK

A handwritten signature in black ink, appearing to be 'E. Kim', written over the printed name.